

US: 10/796,280
Atty. Docket: CL1510ORD

AMENDMENTS TO THE CLAIMS

1. (currently amended) A method for identifying a human who has an altered risk for developing coronary stenosis, comprising determining the identity of a single nucleotide polymorphism (SNP) in said human's nucleic acids as represented by position 101 of SEQ ID NO: 19350 or its complement ~~detecting a single nucleotide polymorphism (SNP) at position 101 of SEQ ID NO: 19350 in a nucleic acid sample from said human,~~ wherein the identity of the SNP being G the presence of G position 101 of SEQ ID NO: 19350 or its complement thereof indicates said human is at an increased risk of developing coronary stenosis as compared to a human having an A at the SNP, and the identity of the SNP being A the presence of A at position 101 of SEQ ID NO: 19350 or its complement thereof indicates said human is at a decreased risk of developing coronary stenosis as compared to a human having a G at the SNP.

2. - 5. (canceled)

6. (currently amended) The method of claim 1 in which the identity of the SNP is determined ~~detection is carried out~~ by a process selected from the group consisting of: allele-specific probe hybridization, allele-specific primer extension, allele-specific amplification, sequencing, 5' nuclease digestion, molecular beacon assay, oligonucleotide ligation assay, size analysis, and single-stranded conformation polymorphism.

7. - 24. (canceled)

25. (currently amended) The method of claim 1, wherein the SNP to be determined ~~detected~~ is located at position 79090 of SEQ ID NO: 12227.

26. (currently amended) The method of claim 1, wherein the SNP to be determined ~~detected~~ is located in the LPA gene.

US: 10/796,280
Atty. Docket: CL15100RD

27. (currently amended) The method of claim 1, wherein the identity of the SNP is determined ~~detection is carried out~~ by using a set of detection reagents comprising the oligonucleotide sequences of SEQ ID NO: 68222, SEQ ID NO: 68223, and SEQ ID NO: 68224.

28. (currently amended) A method for identifying a human who has an increased risk for developing coronary stenosis, comprising determining the identity of a single nucleotide polymorphism (SNP) in said human's nucleic acids as represented by position 101 of SEQ ID NO: 19350 or its complement ~~detecting a single nucleotide polymorphism (SNP) at position 101 of SEQ ID NO: 19350 in a nucleic acid sample from said human~~, wherein the identity of the SNP being G ~~the presence of G at position 101 of SEQ ID NO: 19350 or its complement thereof~~ indicates said human is at an increased risk of developing coronary stenosis as compared to a human having an A at the SNP.

29. (currently amended) The method of claim 28 in which the identity of the SNP is determined ~~detection is carried out~~ by a process selected from the group consisting of: allele-specific probe hybridization, allele-specific primer extension, allele-specific amplification, sequencing, 5' nuclease digestion, molecular beacon assay, oligonucleotide ligation assay, size analysis, and single-stranded conformation polymorphism.

30. (currently amended) The method of claim 28, wherein the SNP to be determined ~~detected~~ is located at position 79090 of SEQ ID NO: 12227.

31. (currently amended) The method of claim 28, wherein the SNP to be determined ~~detected~~ is located in the LPA gene.

32. (currently amended) The method of claim 28, wherein the identity of the SNP is determined ~~detection is carried out~~ by using a set of detection reagents comprising the oligonucleotide sequences of SEQ ID NO: 68222, SEQ ID NO: 68223, and SEQ ID NO: 68224.

33. (currently amended) A method for identifying a human who has a decreased risk for developing coronary stenosis, comprising determining the identity of a single nucleotide

US: 10/796,280
Atty. Docket: CL1510ORD

polymorphism (SNP) in said human's nucleic acids as represented by position 101 of SEQ ID NO:19350 or its complement detecting a single nucleotide polymorphism (SNP) at position 101 of SEQ ID NO: 19350 in a nucleic acid sample from said human, wherein the identity of the SNP being A the presence of A at position 101 of SEQ ID NO: 19350 or its complement thereof indicates said human is at a decreased risk of developing coronary stenosis as compared to a human having a G at the SNP.

34. (currently amended) The method of claim 33 in which the identity of the SNP is determined ~~detection is carried out~~ by a process selected from the group consisting of: allele-specific probe hybridization, allele-specific primer extension, allele-specific amplification, sequencing, 5' nuclease digestion, molecular beacon assay, oligonucleotide ligation assay, size analysis, and single-stranded conformation polymorphism.

35. (currently amended) The method of claim 33, wherein the SNP to be determined ~~detected~~ is located at position 79090 of SEQ ID NO: 12227.

36. (currently amended) The method of claim 33, wherein the SNP to be determined ~~detected~~ is located in the LPA gene.

37. (currently amended) The method of claim 33, wherein the identity of the SNP is determined ~~detection is carried out~~ by using a set of detection reagents comprising the oligonucleotide sequences of SEQ ID NO: 68222, SEQ ID NO: 68223, and SEQ ID NO: 68224.

38. (new) The method of claim 1, further comprising providing a report of the identity of said SNP.

39. (new) The method of claim 1, further comprising providing a report of said human's altered risk for developing coronary stenosis.

40. (new) The method of claim 39, wherein the altered risk is an increased risk for developing coronary stenosis.

US: 10/796,280
Atty. Docket: CL1510ORD

41. (new) The method of claim 39, wherein the altered risk is a decreased risk for developing coronary stenosis.

42. (new) The method of claim 39, wherein the report further shows the identity of said SNP.

43. (new) The method of claim 42, wherein the identity of said SNP is G or its complement thereof, and wherein the report indicates said human has an increased risk of developing coronary stenosis.

44. (new) The method of claim 42, wherein the identity of said SNP is A or its complement thereof, and wherein the report indicates said human has a decreased risk of developing coronary stenosis.

45. (new) The method of any one of claims 38-44, wherein the report is in paper form or computer readable medium form.